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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No	Applicant(s)			
· • •				LHILA, RAMESH			
Of	fice Action Summary	09/898,969		Art Unit			
OI.	nee Action Guinnary	Examiner		1771	(~)\(\frac{1}{2}\)		
	MAIL INC. DATE - SALE	Hai Vo	over sheet with the o		Idress		
<i> The l</i> Period for Repl	MAILING DATE of this communicatio Y	ni appears on the t	.over sneet with the C	onespondence ad			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Respo	Responsive to communication(s) filed on <u>24 December 2003</u> .						
,	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4a) Of 5)	4) Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-20 is/are rejected.						
Application Pa	pers						
10)⊡ The di Applic Repla	pecification is objected to by the Examing(s) filed on is/are: a) ant may not request that any objection cement drawing sheet(s) including the dath or declaration is objected to by the	accepted or b) to the drawing(s) becorrection is require	held in abeyance. Se d if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 C			
Priority under	35 U.S.C. § 119						
12) Ackno a) All 1. 2. 3.	wledgment is made of a claim for for b) Some * c) None of:  Certified copies of the priority docu Copies of the certified copies of the application from the International Ee attached detailed Office action for	uments have beer uments have beer e priority docume Bureau (PCT Rule	received. received in Applicat nts have been receiv 17.2(a)).	ion No ed in this Nationa	l Stage		
2) Notice of Dr. 3) Information	ferences Cited (PTO-892) aftsperson's Patent Drawing Review (PTO-9 Disclosure Statement(s) (PTO-1449 or PTO //Mail Date		4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:		<sup>-</sup> O-152)		

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#### Claim objections

1. Claims 1-20 are objected to because of the following informalities: the phrase "by weight" should be added right after a "%" sign to clarify the concentration of each component in the composition. It is unclear whether the amount of each component in the adhesive tape is defined as % by weight or % by volume. Appropriate correction is required.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-8, 11-14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521). Everaerts discloses an adhesive tape comprising a core layer and a pressure-sensitive adhesive layer coated on at least one side of the core layer (column 9, lines 30-60). The core layer of the adhesive tape of Everaerts corresponds to the backing layer of the claimed invention. Everaerts discloses the core layer comprising an acrylic copolymer which may incoporate similar or dissimilar acrylic monomers having similar or different additives from those acrylic copolymers contained in the adhesive layer. The core layer comprises about 80 parts or more of an alkyl acrylate monomer, and up to

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about 20 parts of a copolymerizable modifier monomer, based upon 100 parts by weight of acrylic monomer i.e. alkyl acrylate monomer plus modifier monomer (column 9, lines 40-48). Everaerts also discloses alkyl acrylate monomers can be formed from a mixture of two independent monomers (column 5, lines 20-25). The same token is applied to the modifier monomers. Everaerts discloses modifier monomers can be formed from a mixture of two independent monomers, basic monomer and acidic monomer (column 5, lines 36-49, column 7, lines 20-39). Everaerts discloses a core layer of the pressure sensitive adhesive tape further comprising a filler and a crosslinker. Everaerts discloses the presence of the primer layer between the acrylic foam core and the pressure sensitive adhesive (column 10, lines 30-31 and table 9). The foam tapes with the use of a primer are subjected to 180° Peel Adhesion testing. The results of the tests in Table 9 show interfacial failure between the primer and foam backing (FP). Everaerts does not specifically disclose a composition of the primer layer. Ragland, however, teaches a pressure sensitive adhesive laminate comprising a silicone foam, an acrylic pressure sensitive adhesive layer, and a urethane primer layer disposed between the silicone foam and an acrylic pressure sensitive adhesive layer to provide the laminate having longterm bond strength (abstract). This is important to the expectation of successfully practicing the invention of Everaerts, thus suggesting the modification. Ragland discloses that the composition of the primer layer can be found in US 3,779,794 to William De Santis (column 6, line 65-67 to column 7, line 1). William De Santis is relied as evidence that teaches the urethane primer being a silane modified

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elastomer solution (column 6, lines 72-75). It is known in the adhesive art, the urethane primer is a silane modified elastomer solution in view of the teaching of William De Santis. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silane modified elastomer solution as the primer layer of Everaerts motivated by the desire to provide the adhesive tape with longterm bond strength.

Everaerts does not specially disclose the amount of each individual monomer in the foam layer. However, these features would have been recognized by one skilled in the art as dependent upon the intended use of the product. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the cited monomers having the amount ranges instantly claimed motivated by the desire to provide an adhesive tape having excellent ability to adhere to acid-rain resistant automotive paints. This is in line with *In re Aller*, 105 USPQ 233 which holds that discovering the optimum or workable ranges involves only routine skill in the art.

Everaerts discloses the core layer comprising 5 to 65 volume percent of hollow glass microspheres (column 9, lines 40-43). However, the feature would have been recognized by one skilled in the art to promote the foam-like appearance of the core layer (column 9, line 53). As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the microsphere having the amount range instantly

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claimed motivated by the desire to promote the foam-like appearance of the core layer. This is also in line with *In re Aller*, 105 USPQ 233.

- 4. Claims 9, 10, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, further in view of Ko et al (US 5,308,887). Everaerts discloses a core layer of the pressure sensitive adhesive tape further comprising a filler and a crosslinker (column 9, line 65 et seq.). Ko discloses silica, and hydrophobic silica being used a filler in the core layer (column 14, lines 45-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silica or the fumed hydrophobic silica as the filler of the core layer motivated by the desire to alter the properties of the core layer.
- 5. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, further in view of Mazurek et al (US 5,264,278). Everaerts is silent as to 1,4-butanediol diacrylate as a crosslinker and coloring agent as a filler. Mazurek supplies the missing features. Mazurek discloses 1,4-butanediol diacrylate incorporated into the adhesive composition as a crosslinker and a dye being used as a filler (column 11, line 43, and column 12, line 41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect crosslinking. It would

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have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a dye into the core layer motivated by the desire to colorize the adhesive tape.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, in view of Ko et al (US 5,308,887) and Mazurek et al (US 5,264,278). Everaerts discloses the photoinitiator being benzoin ethyl ether (column 9, lines 6-7). Ko discloses a core layer of the pressure sensitive adhesive tape further comprising a hydrophobic silica as a filler (column 14, lines 47-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the core layer by the desire to alter the properties of the core layer.

Everaerts is silent as to 1,4-butanediol diacrylate in the core layer. Mazurek discloses 1,4-butanediol diacrylate being used as a crosslinker (column 11, line 43). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect crosslinking.

## Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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8. The art rejections in the 06/25/03 Office Action have been overcome by the present amendment. The cited references fail to teach or suggest a composition of the primer layer.

9. The terminal disclaimer filed on 11/21/2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent Application 09/920,182, filed 08/01/2001 has been reviewed and is accepted. The terminal disclaimer has been recorded. The double patenting rejections have been overcome by the terminal disclaimer.

#### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

TERREL MORRIS<sup>1</sup>
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700